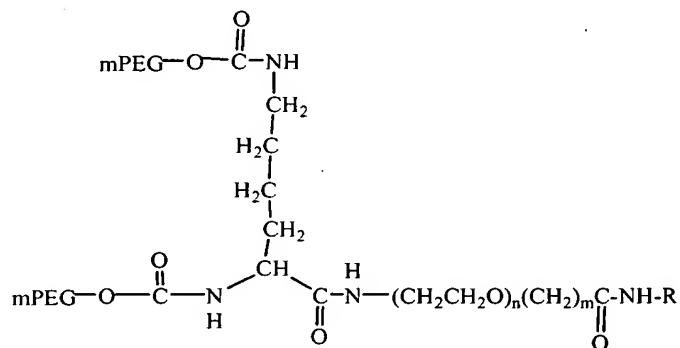


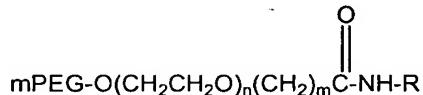
## WHAT IS CLAIMED IS:

1. A method for the prevention and/or  
 5 treatment of a disease or disorder in which use of  
 growth hormone is beneficial, comprising  
 administering to a patient in need thereof a  
 therapeutically effective amount of a poly(ethylene  
 glycol)-modified hGH having the structure of formula  
 10 I or II,



Formula I

or



Formula II

wherein

- n is an integer between 1 and 10;  
 20 m is an integer between 1 and 10;  
 R is human growth hormone or methionyl growth  
 hormone,  
 alone or in combination with another therapeutic  
 agent, wherein said disease or disorder in which use  
 25 of growth hormone is beneficial is selected from the  
 group consisting of Erectile dysfunction, HIV  
 lipodystrophy, Fibromyalgia, Osteoporosis, Memory  
 disorders, Depression, Crohn's disease, Skeletal

dysplasias, Traumatic brain injury, Subarachnoid haemorrhage, Noonan's syndrome, Down's syndrome, Idiopathic short stature (ISS), End stage renal disease (ESRD), Very low birth weight (VLBW), Bone marrow stem cell rescue, Metabolic syndrome, Glucocorticoid myopathy, Short stature due to glucocorticoid treatment in children, and Failure of growth catching for short premature children.

10        2. The method of claim 1, wherein said disease or disorder in which use of GH is beneficial is selected from the group consisting of idiopathic short stature, very low birth weight, traumatic brain injury, metabolic syndrome, and Noonan's syndrome.

15        3. The method of either claim 1 or 2, wherein n equals 4 and m equals 3.

20        4. The method of claim 3, wherein said poly(ethylene glycol)-modified hGH is having the structure of formula I with n equals 4 and m equals 3.

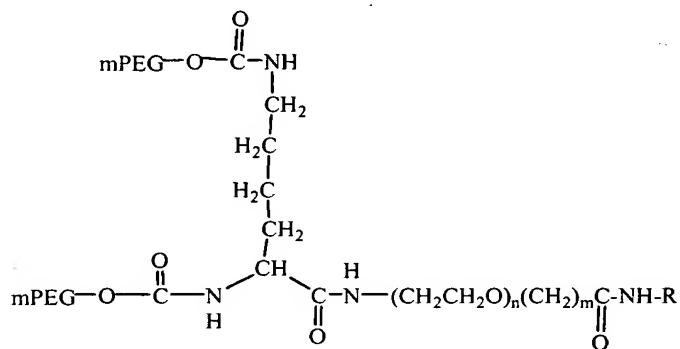
25        5. The method of claim 1, wherein said human growth hormone comprises the amino acid sequence of SEQ ID NO:1.

30        6. The method of claim 5, wherein greater than 90% of said polyethylene glycol is conjugated to an amino-terminal phenylalanine of the amino acid sequence of SEQ ID NO:1.

35        7. The method of claim 6, wherein greater than 95% of said polyethylene glycol is conjugated to an amino-terminal phenylalanine of the amino acid sequence of SEQ ID NO:1.

8. The method of claim 1, wherein each mPEG has a molecular weight of about 20 kDa.

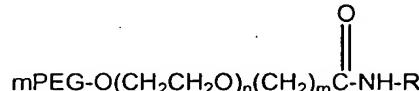
5 9. A composition comprising the human growth hormone-PEG conjugate of formula I or II in combination with another therapeutic agent, and at least one pharmaceutically acceptable carrier.



10

Formula I

or



15

Formula II

wherein

n is an integer between 1 and 10;

20 m is an integer between 1 and 10;

R is human growth hormone or methionyl growth hormone.

10. The composition of claim 9, wherein  
 25 said poly(ethylene glycol)-modified hGH is having the structure of formula I with n equals 4 and m equals 3.